To: Russel Bacon, Thunder Basin National Grassland Supervisor January 6, 2020
Thunder Basin Plan Amendment Comments
Thunder Basin National Grassland Supervisor's Office
2468 Jackson Street
Laramie, WY 82070

From: Greg Warren

Subject: 2020 Thunder Basin National Grassland Plan Amendment #55479

Submitted: https://cara.ecosystemmanagement.org/Public//CommentInput?Project=55479

Dear Mr. Bacon,

The following are comments on the Thunder Basin National Grasslands DEIS and Draft Plan Amendment. This submittal supplements scoping comments of May 15, 2019 (**Attachment A**).

Contents

Introduction

"*The largest vegetative province in North America is the native prairie. Some states have had declines in tall grass prairie of 99.9 percent. It is estimated that less than 34 percent of true mixed grass prairie and less than 23 percent of true short grass prairie still exist in native vegetation. This loss of native vegetation is due primarily to conversion to non-active crops; damming of major river systems for flood control and irrigation; and draining of wetlands for crop production. Overgrazing by livestock, suppression of fire, invasion of exotic plants, and fragmentation of native grasslands continues to have negative impacts on the remaining native grassland ecosystems… There are currently 59 listed threatened or endangered species in the Plains, with another 728 candidates for listing. Of the 435 bird species that breed in the United States, 330 have been documented to breed in the Great Plains. Most of these species show declines of 14-91 percent due to losses of habitat critical for nesting and wintering. Prairie dog populations currently exist in less than 5 percent of their historic range. Species associated with the prairie dog are declining, and many are listed as threatened, endangered, or sensitive species.*" (Grasslands Review Team, Page 4, 1995)

The National Grasslands were created by the Bankhead Jones Farm Tenant Act as amended, which states that, "*The Secretary is authorized and directed to develop a program of land conservation and land utilization, in order thereby to correct maladjustments in land use, and thus assist in controlling soil erosion, reforestation, preserving natural resources, protecting fish and wildlife, developing and protecting recreational facilities, mitigating floods, preventing impairment of dams and reservoirs, developing energy resources, conserving surface and subsurface moisture, protecting the watersheds of navigable streams, and protecting the public lands, health, safety, and welfare, but not to build industrial parks or establish private industrial or commercial enterprises… It is not at all apparent from the Bankhead-Jones Farm Tenant Act (BJFTA) whether livestock grazing on national grasslands is even one (let alone the only) way that the secure occupancy of farms and farm homes may be promoted*." (BJFTA Primer page 11).

The Forest Service describes the objectives for the range management program as:

1. *"To manage range vegetation to protect basic soil and water resources, provide for ecological diversity, improve or maintain environmental quality, and meet public needs for interrelated resource uses.*
2. *To integrate management of range vegetation with other resource programs to achieve multiple use objectives contained in Forest land and resource management plans.*
3. *To provide for livestock forage, wildlife food and habitat, outdoor recreation, and other resource values dependent on range vegetation.*
4. *To contribute to the economic and social well-being of people by providing opportunities for economic diversity and by promoting stability for communities that depend on range resources for their livelihood.*
5. *To provide expertise on range ecology, botany, and management of grazing animals.*

It was never the intent of the Congress that all uses would occur on all areas. Individual forests determine what uses are feasible and appropriate for different areas through the development and revision of the Land and Resource Management Plans. Once a determination has been

made that grazing is feasible and appropriate for an area, grazing is planned and managed taking into consideration all the other uses of the area."

"*Livestock grazing on the Thunder Basin National Grassland is permitted through 10-year grazing agreements held by three different grazing associations: Thunder Basin, Inyan Kara, and Spring Creek. The grazing association is the "permittee", and the association is issued a grazing permit to graze livestock on NFS land. The association, in turn, issues 10-year permits to its members to graze their livestock on one or more of the grazing allotments*" (DEIS page 75). These associations are commercial enterprises that are currently permitted to graze livestock and construct ranged improvements, which includes in part the Thunder Basin Grazing Association, which expended $950,000 to lay 25 miles of pipelines and develop 16 water wells between 2007 and 2010.

The National Grasslands provide aesthetic beauty in many forms including wildlife viewing by being home to a diversity of species including golden eagles, grouse, pronghorn, elk, prairie dogs, and bison. The grasslands are rich in biodiversity. National Grassland units contain the largest representation of threatened and endangered species. In addition, our grasslands contain thousands of species of wildflowers, and stunning grass filled vistas that are available year-round for the viewing enjoyment of the public.

The National Grasslands contain large areas of intact prairie and other grassland types, and they provide the ecosystem service of carbon sequestration in grassland vegetation and soil organic matter. Grassland ecosystem services help sustain, support, and fulfill human life. These services can be tangible or intangible, but they are nevertheless critical for sustaining human well-being. The health and well-being of human populations depend on the services provided by ecosystems and their components: the organisms, soil, water, and nutrients. Additional ecosystem services provided by the Thunder Basin National Grassland include clean water, forage, habitat for wildlife, and pollination of native and agricultural plants.

The following is a brief discussion of the importance and relevance of Thunder Basin National Grassland related to recovery of endangered species and ameliorating the impacts of climate change:

> The most recent five-year status review (USFWS 2008) found that the black-footed ferret remains one of the most endangered mammals in the United States, and continues to warrant endangered status. The goal established in the 2013 Black-footed Ferret Recovery Plan for free-ranging ferrets is a total of at least 3,000 breeding adults, in 30 or more populations, with at least one population in each of at least 9 of the 12 States within the historical range of the species, with no fewer than 30 breeding adults in any population, and at least 10 populations with 100 or more breeding adults, and at least 5 populations within colonies of Gunnison's and white-tailed prairie dogs. Despite more than two decades of reintroduction efforts, only about 400 breeding adults were living in the wild (USFWS 2013). In announcing the availability of the revised black-footed ferret recovery plan (78 FR 77485-77486, Dec. 23, 2013), USFWS concluded that: "*Down-listing of the black-footed ferret could be accomplished in approximately 10 years if conservation actions continue at existing reintroduction sites and if additional reintroduction sites are established. Delisting will be possible if more intensive reintroduction efforts are conducted.*" This DEIS proposed action is

an example of the problem. To date, extremely slow progress has been made towards recovery, and removing the contribution of the Thunder Basin National Grassland reintroduction site would be a huge and damaging step backwards.

The purpose of the 10(j) Rule was to help facilitate reintroductions of the species onto non-federal lands while providing regulatory assurances that will encourage greater private landowner participation in black-footed ferret recovery. Furthermore, it would allow implementation of recovery efforts on non-federal lands to proceed more quickly. The proposed action fails to provide appropriate management direction that would be applicable when an adjacent private landowner elects to participate in ferret recovery efforts. This should be added to the proposed action and alternatives.

Wyoming produced 88 million barrels of oil in 2018, with new wells contributing over 21% of that production output. An example of the current rapid pace of development is a supplemental EIS prepared by the BLM in which a group of companies proposed to drill approximately 5,000 oil and natural gas wells on 1,500 well pads in Converse County, encompassing approximately 1.5 million acres over a 10-year period.

The fifth report by the Intergovernmental Panel on Climate Change (2013) reported that atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. Carbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions. The mean rates of increase in atmospheric concentrations over the past century are, with very high confidence, unprecedented in the last 22,000 years. The Planning Rule requires that the plan must provide for ecological sustainability by considering system drivers including climate change (36 CFR 219.8(a)(iv)). The impacts of altered climatic conditions affecting the native vegetation and wildlife must be incorporated as a consideration in the purpose and need for this proposed action.

Forest Service Handbook 1909.12 part 21.13 states, "*The NEPA and Forest planning processes must be integrated. The Responsible Official should provide direction to the Interdisciplinary team in a project initiation letter to ensure that the Interdisciplinary Team develops a strategic approach for coordinating planning and NEPA procedures. The Forest Service NEPA directives are found in FSM 1950 – Environmental Policy and Procedures and in FSH 1909.15 – National Environmental Policy Act Handbook….*" Forest Service regulations 36 CFR Part 220 do not lessen the applicability of the CEQ 40 CFR Part 1500 regulations on National Forest System lands.

Purpose and Need for Action

Location and General Management

DEIS: The DEIS beginning on page 2 provides a statement of location and general management describing in part that, "*The Forest Service has a multiple use mandate for land management, as described in several laws including the National Forest Management Act of 1976, Forest and Rangeland Renewable Resources Planning Act of 1974, Multiple-Use Sustained-Yield Act of*

1960, and in the case of the national grasslands, the Bankhead Jones Farm Tenant Act of 1937, as amended."

Comment: The purpose and need section of a supplemental DEIS and FEIS should establish the unique nature and benefits of the grasslands by thoroughly describing the ecosystem services of the Thunder Basin National Grassland.

Black-Footed Ferret Reintroduction on the Thunder Basin National Grassland

DEIS: The DEIS on page 9 discusses black-footed ferret reintroduction describing that, "*In October 2015, U.S. Fish and Wildlife Service published a 10(j) rule for black-footed ferrets in the State of Wyoming. The rule promotes reintroduction by establishing all populations in Wyoming as nonessential and experimental, thus relaxing the take and consultation requirements associated with endangered species and facilitating acceptance by local landowners and managers. In this rule, U.S. Fish and Wildlife Service personnel also passed leadership of ferret reintroduction to the Wyoming Game and Fish Department. The Wyoming Game and Fish Department has developed a black-footed ferret management plan based on the U.S. Fish and Wildlife Service's black-footed ferret recovery plan that includes the following population objectives to contribute toward recovery of the species:*

- *maintain a minimum of 341 breeding adults distributed among 5 or more populations statewide;*
- *maintain a minimum of 30 breeding adults in each population, with at least 2 populations containing a minimum of 100 breeding adults;*
- *establish at least 2 populations within white-tailed prairie dog (Cynomys leucurus) colonies AND at least 1 population within black-tailed prairie dog colonies, with remaining populations distributed among colonies of either prairie dog species.*

Both the black-footed ferret recovery plan and Wyoming black-footed ferret management plan estimate 70,000 acres of prairie dog colonies will be needed in black-tailed prairie dog and white- tailed prairie dog habitat across the state to meet Wyoming's portion of the rangewide habitat goal to achieve black-footed ferret down-listing or delisting. According to the 10(j) rule, a minimum of 1,500 acres of black-tailed prairie dogs are required for a reintroduction site; the recovery plan also states approximately 4,500 acres of black-tailed prairie dog colonies are expected to be necessary to support at least 30 breeding adult ferrets and more than 15,000 acres are likely needed to support at least 100 ferrets.

Prairie dog colonies are present across the state of Wyoming, and Wyoming Game and Fish Department personnel have developed a strategy to evaluate and prioritize among potential sites to best allocate efforts to meet recovery goals for the state. The prioritization matrix in the management plan includes the following as the minimum requirements for allocating captive-bred ferrets to a reintroduction site:

- *habitat suitability, stability, and management, including the funding and capacity*

to provide prairie dog boundary control where needed and desired;

- *disease monitoring and management, with a particular emphasis on sylvatic plague;*
- *ability to address statewide objectives, including the ability to assess and monitor the status of ferret and prairie dog population;*
- *stakeholder support of reintroduction activities, with particular emphasis on local communities and landowners, including adjacent landowners, permittees, and lessees.*

The full prioritization matrix provides additional ranking criteria including extent of available reintroduction habitat and more detailed evaluation of the local social environment (Wyoming Game and Fish Department 2018).

Barriers to reintroduction on the Thunder Basin National Grassland in the past have included cycles of sylvatic plague, which decrease the population and extent of prairie dog colonies; lack of prairie dog control including boundary control during colony expansions; and lack of acceptance of prairie dogs or reintroduction of black-footed ferrets by adjacent landowners and local communities."

Comment: The Planning rule requires the responsible official to include plan components that provide the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern. A self-sustaining population of black-footed ferrets requires large, dense complexes of prairie dogs. The proposed acreage goals for MA 3.67 are plainly insufficient to contribute to the recovery of black-footed ferrets anywhere on the Thunder Basin National Grassland.

As currently addressed in the MA 3.63 direction, protecting black-footed ferret habitat is the primary consideration in defining the appropriate mix of uses in this small portion of the National Grasslands. The current direction is consistent with requirements of the Bankhead-Jones Farm Tenant Act, Endangered Species Act, and NFMA. Prioritizing the commercial growing of domestic livestock over the recovery of a critically endangered species appears to be contrary to the mission and purpose of the National Grasslands. The grasslands management direction must continue to provide for the long-term conservation of black-tailed prairie dogs and other species associated with prairie dog colonies, and to provide for adequate acreages and distributions to support a future reintroduction of the black-footed ferret, under all alternatives that are analyzed in detail in the DEIS.

The Thunder Basin National Grasslands plan should be revised to address the role of the Grasslands in conserving and recovering black-footed ferrets. Revision should address such issues as:

- Recovery of the black-footed ferret, a species listed as endangered on March 11, 1967, more than 50 years ago, is proceeding at a vastly slower pace than was expected;

- The U.S. Fish and Wildlife Service (USFWS) finalized a 10(j) rule that designates the state of Wyoming as a special area for ferret reintroductions on October 30, 2015;
- Rapid and extensive fragmentation of prairie dog habitat has occurred/is occurring as a result of energy development across the state of Wyoming and across the range of the black-tailed prairie dog;
- There is a need to modify the National Grassland management plan in a way that is responsive to the ongoing and projected future impacts of climate change.

Planning Regulations for Plan Amendments

DEIS: The DEIS on page 10 discusses planning regulations as follows: "*The current (2002) grassland plan, as amended, was written under the direction of the 1982 land management planning regulations. In 2012, Forest Service staff issued a new Planning Rule and in 2015 issued agencywide directives for land management planning in the Forest Service Manual 1920 and Forest Service Handbook 1909.12. An amendment to the 2012 Planning Rule published in December 2016 described in more detail how it applies to plan amendments rather than plan revisions….*"

The DEIS further describes that, "*the responsible official identified substantive requirements of the 2012 Planning Rule that are likely to be applicable to the amendment: 36 CFR 219.8(a) ecological sustainability and (b) social and economic sustainability, 36 CFR 219.9 diversity of plant and animal communities, and 36 CFR 219.10(a) integrated resource management for ecosystem services and multiple use… With respect to the requirement of the rule at 36 CFR 219.10(a), the analysis shows the proposed amendments to prairie dog management should maintain or improve the capability of the plan area to provide for ecosystem services and multiple uses*."

Comment: A review of the DEIS does not indicate that the proposed action and alternatives provide for integrated resource management within the proposed MA 3.67, since plan components to address many uses and activities are not present. The proposed action must clearly identify and address the Thunder Basin Grasslands as a statutorily designated area addressing the requirements of FSH 1909.12 part 24.2. Where multiple designated or special areas overlap in the same land area, the plan must provide compatible direction to meet the needs of all of the designations. This is often done with wording to state that the designated area with the most restrictive plan components must be followed in the management of the land area.

There are many changed conditions on the grasslands that should be addressed through revision processes and not through an amendment to the plan. The Thunder Basin Plan is over 15 years old and is ripe for revision (16 U.S.C. 1604(f)(5)). The proposed amendment is clearly attempting to limit the scope of the proposed actions, but by doing so is limiting reasonable multiple use alternatives that address changed conditions, including climate change. Instead of amending the plan, it should be revised following the planning rule revision procedures.

The following is one example of where the plan direction should be modified to be consistent with the 2012 planning regulations and directives. The existing plan and proposed amendment in many locations inappropriately describe that, "*Primitive conditions with minimal facility*

development will be emphasized. Mineral developments, such as oil and gas wells and pipelines, will be present but visually subordinate to the landscape in the mid and background. Pastures will be large." Oil and gas wells and pipelines are not compatible with Primitive ROS class settings. Amended and revised plan direction should be modified to be consistent with the direction in FSH 1909.12 part 23.23a – Sustainable Recreation and part 23.23f – Scenery. Further direction is found in FSM 2300.

Purpose and Need Statement

DEIS: The DEIS on page 17 states that, "*The purpose of this proposed plan amendment is to:*

- *provide a wider array of management options to respond to changing conditions;*
- *minimize prairie dog encroachment onto non-Federal lands;*
- *reduce resource conflicts related to prairie dog occupancy and livestock grazing;*
- *ensure continued conservation of at-risk species; and*
- *support ecological conditions that do not preclude reintroduction of the black-footed ferret*."

Comment: The statements of purpose and need for the Amendment must be revised to clarify the intent and to provide for the purposes for which the Thunder Basin National Grasslands were established. The purpose and need statements must clearly recognize the ecological purposes of the grasslands and requirements of the ESA, which should be addressed by adding the following statements:

- Preserving natural resources and protecting fish and wildlife populations and habitat;
- Ensuring that habitat requirements are met and necessary acreages are provided to support viable populations of prairie dogs and their associated species on the Thunder Basin National Grassland; and
- Maintaining sufficient acres of prairie dog habitat: (a) to support black-footed ferret reintroduction; (b) to support other dependent species; (c) to maintain Region 2 sensitive species, and (d) protect or improve habitat for potential species of conservation concern (SCC).

Furthermore, the purpose and need must add consideration of the following important changed conditions that were not addressed in the DEIS:

- Recovery of the black-footed ferret, a species listed as endangered on March 11, 1967, more than 50 years ago, is proceeding at a vastly slower pace than was expected;
- Rapid and extensive fragmentation of prairie dog habitat has occurred/is occurring as a result of energy development across the state of Wyoming and across the range of the black-tailed prairie dog; and
- There is a need to modify the Thunder Basin National Grassland land and resource management plan in a way that is responsive to the ongoing and projected future impacts of climate change.

Proposed Action

DEIS: The DEIS on page 17 describes that, "*The major components of the proposal include:*

1. *Change existing Management Area 3.63 – Black-Footed Ferret Reintroduction Habitat to a new Management Area 3.67 – Rangelands with Short-Stature Vegetation Emphasis.*
2. *Change the boundaries for management area 3.67 to use natural barriers to minimize prairie dog movement and to reduce conflicts in management.*
3. *Eliminate requirement to use the Black-tailed Prairie Dog Conservation Assessment and Management Strategy and add necessary plan components to the grassland plan.*
4. *Establish a minimum quarter-mile boundary management zone along boundaries with private or State property.*
5. *Where possible, adopt use of the Natural Resources Conservation Service's ecological site descriptions to describe plant communities, evaluate current and desired conditions, and maintain or improve native vegetation and wildlife habitat.*
6. *Establish a target of 10,000 acres of prairie dog colonies on NFS lands on the Thunder Basin National Grassland to support viable populations of prairie dogs and associated species, such as mountain plover, burrowing owl, and swift fox, and to not preclude reintroduction of black-footed ferret*."

Comment: The Bankhead-Jones Farm Tenant Act of 1937, as amended (7 U.S.C. § 1010) must be a fundamental legal basis for describing the purpose and need of the proposed action and the alternatives to be analyzed. The legislation describes that, "*The Secretary is authorized and directed to develop a program of land conservation and land utilization, in order thereby to correct maladjustments in land use, and thus assist in controlling soil erosion, reforestation, preserving natural resources, protecting fish and wildlife, developing and protecting recreational facilities, mitigating floods, preventing impairment of dams and reservoirs, developing energy resources, conserving surface and surface moisture, protecting the watersheds of navigable streams, and protecting the public lands, health, safety, and welfare, but not to build industrial parks or establish private industrial or commercial enterprises.*"

The purposes of the Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1531 et seq.) are to "*provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved*." The ESA also established as a policy of Congress an affirmative responsibility that "*all federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of this Act*." Conserve is defined under the ESA to mean "*the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary*." The proposed change in wording to "Reintroduction of the black-footed ferret will not be precluded in the Management Area" indicates that the Thunder Basin National Grassland is proposing to abdicate its responsibility to proactively work towards recovery of the species.

As currently addressed in the MA 3.63 direction, protecting black-footed ferret habitat is the primary consideration in defining the appropriate mix of uses in this small portion of the National Grasslands. The current direction is consistent with requirements of the Bankhead-Jones Farm Tenant Act, the Endangered Species Act, and NFMA. Prioritizing the commercial growing of domestic livestock over the recovery of a critically endangered species appears to be contrary to the mission and purpose of the National Grasslands. The grasslands management direction must continue to provide for the long-term conservation of black-tailed prairie dogs

and other species associated with prairie dog colonies, and to provide for adequate acreages and distributions to support a future reintroduction of the black-footed ferret.

Issues, Concerns, and Opportunities

Many of the concerns that are addressed in the DEIS are focused on conflicts between prairie dogs and commercial livestock grazing on the national grasslands. However, none of the alternatives decrease permitted AUMs to the benefit of watersheds and wildlife. A reasonable alternative to be developed that is within the scope of the EIS is to modify the MA 3.67 plan components to benefit grassland wildlife species, while only allowing for commercial livestock grazing where such use is beneficial to preserving natural resources and protecting fish and wildlife. Multiple use range resource values for the grasslands should provide a clearer focus on providing for healthy ecosystems and providing habitat for native species of wildlife.

Proposed Action and Alternatives

Alternative 1 – No Action

DEIS: The DEIS summary describes that, "*Under the no-action alternative, the amended 2002 grassland plan and the 2015 Black-Tailed Prairie Dog Conservation Assessment and Management Strategy would continue to guide management of prairie dogs on the Thunder Basin National Grassland. No changes would be made to either the plan or the 2015 Black-Tailed Prairie Dog Conservation Assessment and Management Strategy. Prairie dog colonies and acreage targets would be managed based on the categories and decision screens described in the 2015 Black-Tailed Prairie Dog Conservation Assessment and Management Strategy. There would continue to be a target of 33,000 acres of prairie dog colonies*."

MA 3.63 Black-footed Ferret Reintroduction Habitat provides the following integrated direction on page 3-16 of the 2001 LMP:

> Theme
>
> Black-tailed prairie dog colony complexes are actively and intensively managed as reintroduction habitat for black-footed ferrets.
>
> Desired Conditions
>
> Large prairie dog colony complexes are established and maintained as suitable habitat for black-footed ferret reintroductions. Land uses and resource management activities are conducted in a manner that is compatible with maintaining suitable ferret habitat.
>
> The Forest Service works with other agencies and organizations to pursue conservation agreements or easements with adjoining land jurisdictions to achieve black-footed ferret recovery objectives. Where landownership patterns are not conducive to effective and successful prairie dog and black-footed ferret management, landownership adjustments with willing landowners may also be used to help resolve management issues.

The U.S. Fish and Wildlife Service is the regulatory agency that determines many of the conditions including when and where black-footed ferrets, an endangered species, may be released.

Riparian habitat of the Cheyenne River Special Interest Area is protected.

Standards and Guidelines

1. Authorize only those uses and activities that do not reduce the suitability of the area as black-footed ferret reintroduction habitat. Standard

2. Manage all prairie dog colonies within this Management Area as though they were occupied by black-footed ferrets, and apply all Standards and Guidelines as though black-footed ferrets occupy all colonies. Standard

Mineral and Energy Resources

1. Oil and gas stipulations for black-footed ferrets (Appendix D) apply to all prairie dog colonies within this management area. Standard

Livestock Grazing

1. Prior to the U.S. Fish and Wildlife Service authorizing a black-footed ferret release, the Forest Service will coordinate and consult with the U.S. Fish and Wildlife Service, the state wildlife agency and other agencies that conduct, authorize or fund predator control to help ensure that predator control activities on the national grassland to reduce livestock losses do not pose significant risks to black-footed ferrets. Standard

Fish and Wildlife

1. Use of rodenticides in a colony to reduce prairie dog populations may occur only after consultation and concurrence of the U.S. Fish and Wildlife Service. The conditions when prairie dog poisoning may be authorized are presented in Chapter 1. Standard

2. Relocation of prairie dogs to establish new colonies and accelerate growth of prairie dog populations in selected areas may occur only after consultation with appropriate state and Federal wildlife agencies. Standard

Recreation

1. To help expand and maintain suitable black-footed ferret habitat, coordinate and consult with the state wildlife agency to prohibit prairie dog shooting within black-footed ferret reintroduction habitat. Standard

Alternative 2 - The Proposed Action: Management Area 3.67

DEIS: The DEIS summary describes that, "*Black-Footed Ferret Reintroduction would be changed to Management Area 3.67 – Rangelands with Short-Stature Vegetation Emphasis and boundaries revised. Prairie dog colonies would be managed toward a target of 10,000 acres in management area 3.67. Boundary management zones would be established around management area 3.67, rodenticide use would be limited to zinc phosphide, and there would be a seasonal recreational shooting restriction in management area 3.67.*"

Comment: This alternative fails to provide for appropriate multiple use plan components, for the reasons detailed below, which is inconsistent with NFMA and the planning regulations. This alternative should be dropped from further consideration or modified to be consistent with NFMA and associated regulations and then presented in a supplemental DEIS. I am strongly opposed to shifting from the protection of black-footed ferret habitat to only protecting known occupied habitat, including weakening oil and gas resource protection stipulations. This alternative fails to protect potential essential habitat as described in FSM 2670.3 and FSM 2670.45.

DEIS: The DEIS on page 32 describes, "*Prairie dog colonies within management area 3.67 would be managed toward a target of 10,000 acres to support associated species such as mountain plover, burrowing owl, and swift fox. Management that adapts to fluctuations of colony acreage could occur while managing toward the 10,000-acre target*."

Comment: I recommend supplementing this direction by adding, "*Large prairie dog colony complexes are established and maintained as suitable habitat for black-footed ferret reintroductions. Land uses and resource management activities are conducted in a manner that is compatible with maintaining suitable ferret habitat*."

DEIS: The DEIS on page 32 describes, "*Control of prairie dogs within 1 mile of residences would continue to be the highest priority for control, and all lethal and nonlethal control tools not otherwise restricted in this plan would continue to be available within 1 mile of residences at any time. To ensure effectiveness of treatments, prairie dog control efforts by Forest Service personnel would be prioritized where the adjacent landowner engages in concurrent control efforts*."

Comment: The direction should recognize that effective barriers may exist that reduce the need for a 1-mile buffer zone.

DEIS: The DEIS on page 32 describes, "*Where persistent or imminent prairie dog colony encroachment occurs within management area 3.67, a temporary 3/4-mile boundary management zone could be used to prevent encroachment. Requests would be considered by Forest Service personnel in the context of acreage targets, compliance with other plan standards and guidelines, and site-specific information. To ensure effective treatments, prairie dog control efforts by Forest Service personnel should be prioritized where the adjacent landowner engages in concurrent control efforts*."

Comment: The terms "persistent or imminent" are not defined by the DEIS and no scientific basis is provided regarding the appropriateness or effectiveness of a ¾ mile boundary management zone in such circumstances. Management actions based on this direction therefore would be arbitrary and capricious. This direction does not conserve potential essential black-footed ferret habitat and must be deleted.

DEIS: The DEIS on page 33 describes, "*If Forest Service personnel determine lethal control beyond density control is warranted and the total area of prairie dog colonies is less than 7,500 acres within management area 3.67, then satellite colonies could be identified outside management area 3.67 to temporarily allow lethal control within management area 3.67. The sum of satellite colony acres and colony acres in management area 3.67 should be greater than*

7,500 acres before allowing lethal control within management area 3.67, so at least 7,500 acres remain following control."

Comment: This direction does not conserve potential essential black-footed ferret habitat and must be deleted.

DEIS: The DEIS on page 33 describes, "*Recreational prairie dog shooting would be prohibited from February 1 to August 15 in management area 3.67, including in the boundary management zone*."

Comment: Unmitigated recreational shooting of prairie dogs within potential essential black-footed ferret habitat is inconsistent with the purposes for which the National Grasslands were created and does not conserve black-footed ferret habitat. This direction should be deleted.

DEIS: The DEIS on page 34 describes, "*Density control (for example, using rodenticides, translocation, or collapsing of burrows to reduce the number of live prairie dogs within a colony) could be used to maintain desired vegetation conditions within a prairie dog colony. Desired vegetation structure and composition may vary by ecological site or colony*."

Comment: There is no scientific evidence that justifies using "density control" within a prairie dog colony as a means of reducing the incidence of plague. This speculative concept has no basis in science and makes no sense in light of the natural behavior of prairie dogs and the social organization within their colonies. Density control should be removed from the proposed action and any alternative analyzed in detail.

Application of deltamethrin dust is the current proven method of preventing or controlling plague epizootics. Recombinant ''sylvatic plague vaccine'' may be available in the future.

Alternative 3 - Grassland-wide: Management Area 3.67

DEIS: The DEIS summary describes that, "*Black-Footed Ferret Reintroduction would be changed to Management Area 3.67 – Rangelands with Short-Stature Vegetation Emphasis and boundaries revised. Prairie dog colonies would be managed toward a target range of 10,000 to 15,000 acres across the grassland, with at least one 1,500-acre complex in management area 3.67. Boundary management zones would be established grassland-wide, rodenticide use would be limited to zinc phosphide except in boundary management zones where anticoagulants and fumigants may be approved for use, and there would no recreational shooting restrictions associated with prairie dog management*."

Comment: This alternative fails to provide for appropriate multiple use plan components, which is inconsistent with NFMA and the planning regulations. A single colony complex of 1,500 acres is insufficient to support a self-sustaining population of black-footed ferrets, and unregulated shooting would have adverse effects in multiple species of wildlife. The alternative should be dropped from further consideration or modified to be consistent with law and then presented in a supplemental DEIS. Grassland-wide direction should be addressed through revision of the plan.

Alternative 4 – Prairie Dog Emphasis

DEIS: The DEIS summary describes that, "*This alternative retains much of the management described in the current grassland plan and 2015 Black-Tailed Prairie Dog Conservation Assessment and Management Strategy but allows more flexibility in management, especially with regard to boundary management. Management Area 3.63 – Black-Footed Ferret Reintroduction would be renamed to Management Area 3.67 – Rangelands with Short-Stature Vegetation Emphasis but boundaries would remain the same. Prairie dog colonies would be managed toward a target of 18,000 acres in specific areas, with associated boundary management zones. Rodenticide use would be limited to zinc phosphide, and recreational shooting would be prohibited in management area 3.67.*"

Comment: This alternative fails to provide for appropriate multiple use plan components, which is inconsistent with the NFMA and the planning regulations. This alternative should be dropped from further consideration or modified to be consistent with law and then presented in a supplemental DEIS.

Proposed Alternative 5 – Native Prairie Ecosystem Emphasis

Proposed Alternative to be Developed in Detail: The exterior boundary for proposed Alternative 5 MA 3.67 and embedded SIA boundary is depicted on the map in **Appendix A**. The MA acreage available for prairie dog emphasis after applying BMZ setbacks is approximately 40,000 acres. This alternative retains much of the direction proposed for Alternative 4 as described in the Appendix A of the DEIS, but adds plan components to MA 3.67 that result in integrated resource management.

Alternative 5 MA 3.67 Proposed plan components:

Desired Conditions

1. Large prairie dog colony complexes are established and maintained as black-footed ferret essential habitat.
2. Land uses and resource management activities are conducted in a manner that is compatible with maintaining black-footed ferret habitat.
3. Boundary Management Zones promote native grassland plant and wildlife species with the exception of prairie dogs.
4. The Management Area preserves native grasslands and protects native fish and wildlife.
5. The Management Area is designated and managed as essential habitat for black-footed ferrets.

Fish and Wildlife Standards and Guidelines

1. Authorize only those uses and activities that do not reduce the suitability of the area as black-footed ferret reintroduction habitat. Standard

2. Manage all prairie dog colonies within this Management Area as though they were occupied by black-footed ferrets, and apply all Standards and Guidelines as though black-footed ferrets occupy all colonies. Standard

3. Any use of lethal control of prairie dog colonies must include design criteria to minimize impacts to species that are associated with prairie dog colonies, including mountain plover, burrowing owl, and swift fox. Standard

4. Prior to the U.S. Fish and Wildlife Service authorizing a black-footed ferret release, the Forest Service must coordinate and consult with the U.S. Fish and Wildlife Service, the state wildlife agency and other agencies that conduct, authorize or fund predator control to help ensure that predator control activities on the national grassland do not pose significant risks to black-footed ferrets. Standard

5. Any use of lethal control of prairie dog colonies must include design criteria to minimize impacts to species that are associated with prairie dog colonies, including mountain plover, burrowing owl, and swift fox. Standard

Mineral and Energy Resources Standards and Guidelines

1. To minimize wildlife habitat impacts, new mineral leases are to include stipulations for no surface occupancy to the extent practicable. Guideline

Livestock Grazing Standards and Guidelines

1. Prior to the U.S. Fish and Wildlife Service authorizing a black-footed ferret release, the Forest Service will coordinate and consult with the U.S. Fish and Wildlife Service, the state wildlife agency and other agencies that conduct, authorize or fund predator control to help ensure that predator control activities on the national grassland to reduce livestock losses do not pose significant risks to black-footed ferrets. Standard

2. Livestock grazing may be allowed to help achieve desired conditions. Guideline

Recreation Standards and Guidelines

1. To help expand and maintain suitable black-footed ferret habitat, coordinate and consult with the state wildlife agency to prohibit prairie dog shooting. Standard

2. To protect wildlife Primitive or Semi-Primitive Non-Motorized ROS settings are maintained or restored. Accepted Semi-Primitive Non-Motorized ROS class inconsistencies include motor vehicle use for administrative purposes, motor vehicle use that is allowed in existing oil and gas development permits, and motor vehicle use on existing Operational Maintenance Level 3 roads. Standard

Vegetation Management Standards and Guidelines

1. Vegetation would be managed to provide a mosaic of native plant communities, with an emphasis on short- stature herbaceous communities. While the entire management area is not intended to be in short- stature vegetation, short-stature vegetation would be emphasized more in this management area than in others for the purpose of providing for prairie dog habitat.[1] Guideline

[1] Short-Stature Vegetation is discussed on page 60 of the DEIS.

Management Strategy

1. Management strategies are found in the 2015 Prairie Dog Conservation Assessment and Management Strategy.

Alternatives Considered but Eliminated from Detailed Study

DEIS: The DEIS on page 48 that, "*Add no surface occupancy stipulation to large colonies and ½-mile buffer. Timing and controlled surface use stipulations exist for management area 3.63 and are proposed for management area 3.67; timing and controlled surface use stipulations also exist for areas with mountain plover or black-footed ferret. A no surface occupancy stipulation is outside the scope of this analysis and is not needed to meet the purpose and need of the plan amendment*."

Comment: The purpose and need description must be revised to ensure that the purposes for which the Thunder Basin National Grassland was established are protected.

A MA 3.67 NSO stipulation plan component is clearly within the scope (40 CFR 1508.25) of this plan amendment EIS. An NSO stipulation would result in avoiding or mitigating (40 CFR 1508.20) resource development impacts to potential essential black-footed ferret habitat and protect other grasslands wildlife resources.

Affected Environment and Environmental Consequences

Proposed Management of Short-Stature Vegetation

DEIS: The DEIS on pages 60 and 61 describes that, "*In the proposed action and the grassland-wide alternative, management area 3.67 is designated as "rangelands with short-stature vegetation emphasis." A proposed desired condition plan component is included in management area direction for each of these alternatives to describe that vegetation would be managed to provide a mosaic of native plant communities, with an emphasis on short- stature herbaceous communities. While the entire management area is not intended to be in short- stature vegetation, short-stature vegetation would be emphasized more in this management area than in others. In the 2002 grassland plan (the no-action alternative) and the prairie dog emphasis alternative, similar conditions are described as objectives with higher percentages of vegetation in early seral stages and low structural stages…*

Short-stature vegetation and a component of bare ground are important habitat for some at-risk species on the Thunder Basin National Grassland, including black-tailed prairie dogs, mountain plover (figure 17), McCown's longspur, and burrowing owl (figure 18). Some at-risk species—burrowing owl and ferruginous hawk, for example—also rely on habitat attributes created exclusively by prairie dogs, such as prairie dog burrows, or on prairie dogs themselves. Future reintroduction of the black-footed ferret would also rely on the presence of prairie dog colonies. Therefore, the proposed action and alternatives include target acres for prairie dog colony extent on NFS lands on the Thunder Basin National Grassland, rather than only emphasizing ecological conditions with the presence of short-stature vegetation."

Comment: Target acres for prairie dog colonies for the Thunder Basin National Grasslands should be addressed through revision processes and not through this amendment that is focused on modifying the MA 3.63 direction. Prairie dog colony target acres for the proposed MA 3.67 must ensure that large prairie dog colony complexes are established and maintained as suitable habitat for black-footed ferret reintroductions. Land uses and resource management activities must be conducted in a manner that is compatible with maintaining suitable ferret habitat. Any use of lethal control of prairie dog colonies must include design criteria to minimize impacts to species that are associated with prairie dog colonies, including mountain plover, burrowing owl, and swift fox.

Managing Toward a Target Extent for Prairie Dog Colonies

DEIS: The DEIS on pages 62 and 63 describe that, "*In the proposed action, 10,000 acres is set as a management target for the extent of prairie dog colonies. Similarly, the grassland-wide alternative includes a target range of 10,000 to 15,000 acres of prairie dog colonies. Prairie dog colonies are not expected to remain stable; even under active management, fluctuations of colony acreage will occur while managing toward the acreage targets. In the current condition, for example, an estimated 625 acres of prairie dog colonies exist on the Thunder Basin National Grassland. Under any alternative, Forest Service personnel would work to conserve these colonies using plague control tools such as deltamethrin and expand prairie dog occupancy on NFS lands toward the target acreage using tools such as translocation.*

During times of colony growth, such as during drought conditions, Forest Service personnel may initiate lethal or nonlethal control activities that reduce colony acreages below the management target in anticipation of continued colony expansion. When colonies exceed 10,000 acres, Forest Service personnel will work with agency partners and members of the collaborative stakeholder group to identify strategic locations for lethal and nonlethal control activities that will keep acreages as close to 10,000 as possible. This could include eradication of colonies in the interior of management area 3.67."

Comment: The Planning rule requires the responsible official to include plan components that provide the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern. A self-sustaining population of black-footed ferrets requires large, dense complexes of prairie dogs.

Alternative 2 on page 51 describes that, "Prairie dog *colonies would be managed toward a target of 10,000 acres within MA 3.67. No complexes would be required or designated in standards or guidelines, but desired conditions for management area 3.67 would describe that within management area 3.67, colonies within approximately 4.5 miles of other colonies are maintained, when possible, to develop colony complexes*." The proposed prairie dog colony acre target and range and distribution goals for MA 3.67 are plainly insufficient to contribute to the recovery of black-footed ferrets on the Thunder Basin National Grasslands.

Analysis of Rangeland Vegetation and Livestock Grazing

DEIS: The DEIS on pages 68 and 69 describe that, "*Rangeland vegetation management and livestock grazing are topics driving the proposed plan amendment. One of the primary purposes of the proposed amendment is to reduce resource conflicts related to prairie dog occupancy and livestock grazing, and one of the major issues raised by commenters is the availability of forage for permitted livestock in relation to prairie dog occupancy. An extensive analysis of effects under each action alternative was completed to address these topics…*

Rangeland vegetation and livestock management would be affected by the extent of prairie dog colonies in all four alternatives. The no-action and prairie dog emphasis alternatives would result in the greatest potential occupancy by prairie dogs and the largest negative effects on forage availability and authorized use due to the higher target acreages for prairie dog occupancy. The proposed action and grassland-wide alternatives would have proportionally reduced negative impacts. Use of density control in the proposed action and grassland-wide alternatives when prairie dog colony extents are below proposed target acreages may result in decreased impacts to grazing management depending on past and previous management, age of prairie dog colony, ecological sites, and climatic conditions. Use of boundary management zones for prairie dog control would decrease impacts to forage availability on adjacent private and state properties under all action alternatives."

Comment: Forage for commercial livestock permitted enterprises must not be a key factor in the decision to be made in this proposed amendment. Instead, the purposes for which the Thunder Basin National Grassland was established must control the purpose and need of this amendment and bound the decisions to be made. Recognize that livestock grazing may be allowed for wildlife resource benefits.

Environmental Consequences

NEPA reviews must take a "hard look" at impacts that alternatives under consideration would have on the human environment if implemented. This means that there must be evidence that the agency considered all foreseeable direct, indirect, and cumulative impacts, used sound science and best available information, and made a logical, rational connection between the facts presented and the conclusions drawn. Analyzing impacts means considering how the condition of a resource would change, either negatively or positively, as a result of implementing each of the alternatives under consideration. A written impact analysis that focuses on significant issues should be included in the environmental consequences section of a NEPA document. A written impact analysis should: (1) describe the impacts that each of the alternatives under consideration would have on affected resources; (2) use quantitative data to the extent practicable; (3) discuss the importance of impacts through consideration of their context and intensity; and (4) provide a clear, rational link between the facts presented and the conclusions drawn.

Direct Impacts - Direct impacts are impacts "which are caused by the action and occur at the same time and place" (1508.8(a)). Indirect Impacts - Indirect impacts are impacts "which are caused by the action and are later in time or farther removed in distance, but are still

reasonably foreseeable" (1508.8(b)). Cumulative Impacts - In addition to direct and indirect impacts, the agency is required to analyze the cumulative impacts of each alternative (1508.25(c)). A cumulative impact is an "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (1508.7). A cumulative impact analysis must consider the overall effects of the direct and indirect impacts of the proposed action, when added to the impacts of past, present, and reasonably foreseeable actions on a given resource.

To assess cumulative impacts, the assessment will need to identify past, present, and reasonably foreseeable future actions that affect the same resources as the proposed action or alternatives. Past, present, and reasonably foreseeable future actions are not limited to agency actions, but could be actions taken or proposed by any federal, state, or local government or a private entity, and are actions that are not included in the proposal or alternatives under consideration. To be considered under the cumulative analysis section of the EIS, past actions should have ongoing impacts that are presently occurring. Reasonably foreseeable future actions include those federal and non-federal activities not yet undertaken, but sufficiently likely to occur, that a decision maker should take such activities into consideration in reaching a decision. This includes, but is not limited to, activities for which there are existing decisions, funding, or proposals. Reasonably foreseeable future actions do not include those actions that are highly speculative or indefinite. It is important to note that past, present, and reasonably foreseeable future actions are limited to human actions, meaning they are attributable to specific individuals or entities.

Analysis of Wildlife Resources

DEIS: The DEIS beginning on page 108 states that, "*Wildlife management is a topic driving the proposed plan amendment. Some of the primary purposes of the proposed amendment are to reduce resource conflicts related to prairie dog occupancy and livestock grazing, to ensure continued conservation of at-risk species, and to support ecological conditions that do not preclude reintroduction of the black-footed ferret. Some of the major issues raised by commenters are viability of sensitive species and potential species of conservation concern, black-footed ferret recovery, and impacts of rodenticides and recreational shooting on wildlife. An extensive analysis of effects under each action alternative was completed to address these topics...*

Effects to wildlife species as a result of the proposed plan amendment are formally evaluated in a biological assessment, a biological evaluation, and a potential species of conservation concern analysis, which are separate documents posted to the project web site. Evaluations for potential species of conservation concern were also completed to support this plan amendment and are posted to the project website."

Table 24 on page 110 summarizes the effects for endangered species, Forest Service sensitive species, and potential species of conservation concern (SCC). The DEIS is not clear as to whether or not the determination is for only the proposed action or all action alternatives.

Mammal	Black-footed ferret	Endangered	No Impact
Mammal	Black-tailed prairie dog	Sensitive; Potential SCC	May adversely impact individuals but not likely to result in a loss of viability in the planning area, nor cause a trend toward Federal listing; No substantial adverse impacts or substantially lessened protections as a result of the plan amendment

The analysis area is described on page 111 as including, "*the full Thunder Basin National Grassland. For many sensitive species, the analysis of direct, indirect, and cumulative effects focuses within proposed management area 3.67, as described by the proposed action. This area is referred to as the "proposed action area." It is large enough to be representative of the effects of natural events (fire, drought, etc.) and management activities that occur on the planning unit, across the landscape. In addition, the area is sufficiently large enough to evaluate the habitat for all species addressed*."

The DEIS describes that, "*Under 36 CFR 219.9(b)(1), the responsible official must determine whether the plan components required by 36 CFR 219.9(a) provide the ecological conditions necessary to "contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern within the plan area*."

Comment: The DEIS fails to recognize the CEQ NEPA requirements 40 CFR Parts 1500-1508. Specific areas of concern include Section 1502.16 Environmental consequences, Section 1502.24 Methodology and scientific accuracy, and 1508.7 Cumulative impact. A supplement DEIS should fully address the requirements of the CEQ regulations. The effects of each alternative on species that are listed as threatened or endangered, sensitive species, and potential SCC must be considered and disclosed, including evaluation of direct, indirect and cumulative impacts.

The described purpose and need of the amendment is inconsistent with providing for the purposes for which the Thunder Basin National Grassland was established and must be amended as described in these comments. A discussion in this section of the DEIS must describe effects of the alternatives on purposes of the National Grasslands.

Black-Footed Ferret

DEIS: The DEIS beginning on 114 states that, "*A full analysis of the black-footed ferret is included in the biological assessment and the biological evaluation. This section only provides rationale for the effects determination and addresses the issue of black-footed ferret reintroduction…*

Black-footed ferrets are not known or expected to inhabit the Thunder Basin National Grassland. Neither wild ferrets, nor any individuals from a nonessential experimental population are present. In addition, no critical habitat is designated. Because it has been determined by the U.S. Fish and Wildlife Service that the likelihood of identifying wild ferrets in Wyoming outside of those resulting from reintroductions is minimal (U.S. Fish and Wildlife Service 2013), implementation of the Thunder Basin National Grassland 2020 plan amendment, would have no effect on the extirpated, non-experimental populations of black-footed ferret…

Reintroduction of the black-footed ferret was analyzed to address issues raised during the public scoping period, requirements of the 2012 Planning Rule, and Forest Service responsibilities under the Endangered Species Act. Alternatives were designed to meet the purpose and need for the project, including to not preclude reintroduction of the black-footed ferret. The best available data indicate the reintroduction of black-footed ferrets to Wyoming is biologically feasible and will promote conservation and recovery of the species.

As the lead agency for reintroduction efforts in Wyoming, the Wyoming Game and Fish Department leads the Black-Footed Ferret Working Group, which has developed the black-footed ferret reintroduction site prioritization matrix (Wyoming Game and Fish Department 2018). This prioritization matrix allows members to evaluate a number of different criteria related to the biological and social context for reintroduction in order to prioritize new areas for reintroduction.

Only sites that meet the 6 requirements for reintroduction may be evaluated further for prioritization based on 10 ranking criteria. Ranking criteria would then be used to select the highest priority site for reintroduction activities. Not all criteria need to be met for a site to be considered for reintroduction.

This analysis compares the responsiveness of each alternative to the requirements for reintroduction established by the Wyoming Game and Fish Department. Neither the proposed action nor the prairie dog emphasis alternative includes any management components that would preclude reintroduction. The no-action alternative does not meet the requirement for having resources in place to conduct boundary control efforts. The grassland-wide alternative includes the use of anticoagulant rodenticides in the boundary management zone, which may make the site a low priority for allocation of ferrets and may need to cease before officially designating the area as a reintroduction site."

Alternative 1 – No Action

> Effects summary: Lack of a boundary management zone and effective boundary control would likely preclude the reintroduction of ferrets, should the species be considered for reintroduction on the Thunder Basin National Grassland

Alternative 2 – Proposed Action

> Effects summary: The elements of this alternative meet the requirements for reintroduction and do not preclude the reintroduction of ferrets, should the species be considered for reintroduction on the Thunder Basin National Grassland

Alternative 3 – Grassland-Wide Alternative

> Effects summary: The elements of this alternative meet the requirements for reintroduction and do not preclude the reintroduction of ferrets, should the species be considered for reintroduction on the Thunder Basin National Grassland. However, use of anticoagulants in the boundary management zone would make the site a low priority for allocation of ferrets.

Alternative 4 – Prairie Dog Emphasis Alternative

> Effects summary: The elements of this alternative do not preclude the reintroduction offerrets should the species be considered for reintroduction on the Thunder Basin National Grassland.

Alternative 5 – Prairie Dog Emphasis and Integrated Resource Management Alternative

> Effects Summary: To be determined in supplemental DEIS.

Comment: The Planning rule requires the responsible official to include plan components that provide for the ecological conditions necessary to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern. A self-sustaining population of black-footed ferrets requires large, dense complexes of prairie dogs. The proposed acreage goals for MA 3.67 are plainly insufficient to contribute to the recovery of black-footed ferrets anywhere on the Thunder Basin National Grassland.

The purposes of the Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1531 et seq.) are to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." The ESA also established as a policy of Congress an affirmative responsibility that "all federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of this Act." Conserve is defined under the ESA to mean "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary." The proposed change in wording to, "Reintroduction of the black-footed ferret will not be precluded in the Management Area" indicates that the Thunder Basin National Grassland is proposing to abdicate its responsibility to proactively work towards recovery of the species.

As currently addressed in the MA 3.63 direction, protecting black-footed ferret habitat is the primary consideration in defining the appropriate mix of uses in this small portion of the National Grasslands. The current direction is consistent with requirements of the Bankhead-Jones Farm Tenant Act, Endangered Species Act, and NFMA. Prioritizing the commercial growing of domestic livestock over the recovery of a critically endangered species appears to be contrary to the mission of the National Grasslands. The grasslands management direction must continue to provide for the long-term conservation of black-tailed prairie dogs and other species associated with prairie dog colonies, and to provide for adequate acreages and distributions to support a future reintroduction of the black-footed ferret, under all alternatives that are analyzed in detail.

Unavoidable Adverse Effects

DEIS: The DEIS on page 154 states that, "*Direct, indirect, and cumulative effects are described in detail in chapter 3. Adverse effects to prairie dogs and species that depend on prairie dog colonies for habitat are expected under the action alternatives. However, these effects are not expected to lead to loss of viability for any species in the plan area or range-wide. To the extent possible, while meeting the purpose and need for the project, these effects are avoided or offset*

through development of ecosystem and species-specific plan components. Adverse effects may also be expected to uses such as livestock grazing in areas identified for colony conservation and managed to provide short-stature vegetation for prairie dogs and colony-dependent species. Due to the variable nature of colonies, the ability to control prairie dogs in all action alternatives, and the presence of plague in the system, long-term impacts to livestock grazing are not expected to be highly variable."

Comment: The purpose and need statement fails to recognize and protect the purposes for which the Thunder Basin National Grasslands were established. Wildlife resource effects would be avoided if uses such as *livestock grazing in areas identified for colony conservation and managed to provide short-stature vegetation for prairie dogs and colony-dependent species* were only permitted where needed for resource benefits as related to purposes for which the Thunder Basin National Grassland was established.

Cumulative Effects on Wildlife Resources

Comment: The DEIS fails to describe the Past, Present, and Reasonably Foreseeable Activities and Stressors Relevant to Cumulative Effects Analysis for wildlife resources.

A supplemental DEIS must disclose the cumulative effects of oil, gas, and coal development; commercial livestock grazing; recreational shooting; and boundary management zone actions on wildlife populations and habitats.

Geospatial Data

Please provide geospatial datasets for the Supplemental DEIS and FEIS. Geospatial data would improve the quality of my reviews, which may result in more useful comments being provided to the Forest Service to inform the decision. The public geodatabase or shapefile datasets to provide to the public should reflect the information that is identified in the legends of the alternative maps.

Thank you for considering these comments.

Greg Warren

Appendix A. Proposed Alternative 5 Management Area 3.67 Boundaries.